



*Variations
of
Solitaire*

Variations of Solitaire
for OS-9

Version 2.0

Copyright 1994
Zack C Sessions
ColorSystems

Preface

This software is copyrighted and may not be distributed in any form. You may make as many copies for your personal use as you like, in fact you are strongly encouraged to first make backup copy(s) and then install the product from a copy, not the original.

When you open the sealed envelope containing the software media you agree to abide by the Terms of the License Agreement printed on the outside of the envelope. ColorSystems will refund the purchase price only for returned software which has not had the seal broken.

This document was originally prepared with **VED** and formatted with **VPrint**, both running under OS-9 and OSK and available from **Bob van der Poel Software**, P.O. Box 355, Porthill, ID 83853.

Minimum Required Systems

MM/1, OS-9/68000 Version

IMS MM/1 Extended with the special Window Interface by Kevin Darling. (See the on-disk readme file for version information.)

Mouse

CoCo3, OS-9 Level 2 Version

Tandy Color Computer 3 with at least 256K of memory

One floppy disk drive

OS-9 Level 2

Mouse (recommended) or Joystick

For support either call me on the telephone or send me mail at any of the addresses below.

Zack C. Sessions
ColorSystems
P. O. Box 540
Castle Hayne, NC 28429

(910) 675-1706 (*evenings and weekends only!*)

Delphi: COLORSYSTEMS
CompuServe: 71532,1555
Internet: COLORSYSTEMS@DELPHI.COM

Introduction

Congratulations! You are now the owner of a quality package of software from **ColorSystems** designed for the OS-9 Operating System. This package is a collection of five variations of the popular single player card game, *Solitaire*. Presently two hardware configurations are supported, the Tandy Color Computer 3 and the IMS MM/1 (and MM/1a). Solitaire games (also known as *Patience*) have long been popular card games, probably longer than any other known card games. The variations included with this package are:

Pyramid
Klondike
Spider
Poker
Canfield

Most *Solitaire* games have several characteristics that are common to some degree. Most start with a process of *laying out the Tableau*, or the original layout. Next cards are turned over from a *Stock* or possibly the undealt cards in order to perform various *building* operations to the Tableau, and occasionally to a *Foundation*. These building operations usually follow along the lines of *matching cards by rank, suit or color*.

This owner's manual is divided into three parts. This part is a general description of the package and a description of the features that are common to all of the game programs. The second part describes how to install the game programs. There is first a section on MM/1 installation and then a section on CoCo3 installation. Use the section of instructions for the computer type you have.

The third part tells how to play the game programs. This section is further divided into five parts, one for each game variation. Each variation's section then has two parts. First, the description of the official rules of play for the card game and second, how to play the game program on your computer.

Before actually trying to play any of the game programs, I strongly suggest that you read the following section and follow the instructions for installing your new software.

Let me describe a few points of commonality between the game programs. All game programs use an imitation of the **OS-9 Level 2/Multi-View Menu Bar** window type. This Window Type is distinguished by the presence of a *Menu Bar* across the top of the screen. Since the Menu Bar for all of the game programs is the same color as the background, it is invisible, but it's there nonetheless. There are at least two items in the Menu Bar. These usually appear in the Window's foreground color. One item always present is a little *box within a box* icon in the extreme left. This is called the *Close* icon. Across the Menu Bar are optional groups of words called *Menu Items*. All of the game programs in this package only have a single Menu Item, it's name being *Action*.

Introduction

All game programs, when starting, display an introductory welcome message in an Overlay Window. As the message at the bottom of this overlay says, you must *Click to Start the Game!* Some variations support *self play* or *attract mode* operation. If they do, they will automatically go into that mode of operation if the mouse is not clicked for 15 seconds. If the game program does not support such a mode, it will proceed to the start of a new game after 15 seconds of waiting for a mouse click. A mouse click, however, will bypass this waiting period with all game programs and proceed to begin play in your first game. From that point, you need to consult the description of the specific game you are playing for information on how to play that game program.

All game programs begin each hand with a shuffle. To maximize randomness the Deck is shuffled seven times prior to *each* deal. The Deck starts in the standard *new deck* format with the four suits separate and in order by card rank at the beginning of play. A new deck can be requested at any time, which results in the current game being forfeited and a new game started, with the new deck. Each successive shuffle, and each of the seven shuffles during a shuffle during play is a true re-shuffle of the previous shuffle.

All game programs also utilize an *Action Menu* to access game options during play. If you click on the word Action, a *Pull Down Menu* will appear. You'll see several *Menu Items*, the actual number will depend on which variation you are playing. To select one of these items, move the mouse cursor down over the desired item (it will be high-lighted in *reverse video*) and click on it.

Occasionally, the game programs need to obtain additional information from you or present you will some supplementary information. This is done with a special type of Overlay Window called a *Dialog Box*. If additional information is required, the options will be displayed inside *Click Boxes*. Click the mouse cursor in your desired selection.

The descriptions of all games were obtained from research of two books, *According to Hoyle* by Richard L. Frey, and *Hoyle's Rules of Games* by Albert H. Morehead and Geoffrey Mott-Smith. More information on these two books is located at the end of this publication. All game programs follow the strict rules for each game. Several also support a variation of the game.

This version represents a merging of the former CoCo3 version and the former MM/1 into a common version. There are still a few places where the game play slightly differs between the MM/1 and CoCo3 versions. Those differences are all covered later.

Good luck and have fun playing *Variations of Solitaire* from **ColorSystems!**

Installation - MM/1

Installation Instructions

MM/1, OS-9/68000 Version

This version is distributed on a single DSDD 3.5" diskette which is in Microware Universal format. High density disk in MM/1 format is available on request. To be able to read the diskette which is in Universal format, you will need a device descriptor that matches the following dmode display:

```
drv=0 stp=3 typ=$26 dns=$03 cyl=79 sid=2 vfy=0 (on) sct=16 t0s=16
sas=8 ilv=2 tfm=0 toffs=1 soffs=1 ssize=256 cntl=$0000 trys=0 lun=0
wpc=0 rwr=0 park=0 lsnoffs=0 totcyls=80 ctrlrid=0 rates=$10
scsiopt=$0000 maxcount=65535
```

The **drv=0** can be different if you have more than one floppy disk device and you will be using a device other than device 0.

The files on the distribution diskette are as follows:

File Name	Description
-----	-----
CMDS/Pyramid	Game Program
CMDS/Klondike	*
CMDS/Spider	*
CMDS/Poker	*
CMDS/Canfield	*
CMDS/Solitaire	Menu Program

Installation

First thing to do is make a backup copy of your game disk. If you are unsure how to do this, I suggest reading about the OS-9 backup command in the appropriate OS-9 manual. Once you have made a copy, place your original disk in a safe place. Next place the backup copy in a floppy drive. The following instructions assume that the floppy drive is called /u0 and that you plan to copy the game files to a device called /dd. This device can be a hard drive or another floppy drive. If these device names do not correspond with your system, simply replace these device names with your device name from your system.

To install your game programs, copy the game program binary files to your normal CMDS directory with commands like:

```
$ chd /u0/cmds
$ dsave -e /dd/cmds
```

Installation - MM/1

If you have enough free memory, you can accelerate the `dsave` command by adding a `-b=60` command line option. If you had program file(s) in the target directory specified by the `dsave` command with the same name(s) then when that file is attempted to be copied, you will get a warning message and given the option to quit or continue. You may or may not want to save that file(s) away before proceeding.

You can copy the game program's binary files to ANY directory you wish, but OS-9 convention is that all executable binaries are in some directory called CMDS. Normally this will be `/dd/CMDS` or `/dd/USR/CMDS` or it can even be something like `/dd/games/CMDS`. In order to run it, the game program must either be in your *current execution directory* or already pre-loaded into memory. If not, you must change your current execution directory to the directory that contains the game program. As in the first example location mentioned, `/dd/games/CMDS`, you would perform a:

```
$ chx /dd/games/cmds
```

How to Run a Game Program

To run any of the game from any standard window type device, enter the following command:

```
$ klondike
```

Alternatively, to run the game in the next available window, enter the following command:

```
$ klondike <>>>/w&
```

This format, however, requires that a free window device available.

There is also a *Menu Program* included which you can use to play any of the games. To run it enter the command:

```
$ solitaire n
```

The menu program can be run in the next available window device using syntax similar to the previous example. This program displays the names of the five game programs. To run one of the game programs, simply point the mouse cursor somewhere on top of the name, the name of the game will change from white to red, and click the left mouse button. (*The MM/1 version does not use the "n" command line option. It should be omitted when running this program on an MM/1!*)

Command Line Options

All game programs support a variety of command line options. All command line options may be specified in either upper or lower case. If multiple options are specified, do **not** separate them with spaces or any other delimiter. Any invalid or otherwise unrecognized options are ignored and no error is signaled. This is a description of those options.

Instant Move

This option is requested by including an "I" on the command line. It negates the default action of *Animation*. All games that support animation are in Animate On mode by default. If you do not wish to have the game to animate the movement of cards then you may turn it off by specifying this command line option. The games that support this option are *Klondike*, *Spider*, *Poker*, and *Canfield*.

Assist On

Some variations have an optional Assist Mode. By default this feature is in the Assist OFF state. To start the game program with this state on the Assist ON state, specify the "A" command line option. The games that support this option are *Pyramid*, *Klondike*, and *Canfield*.

Variation

Some games support a variation of the rules for the game in question. By default strict rules are in effect by default. To start up the game in the variation mode, specify the "V" command line option. Games that support this option are *Pyramid* and *Poker*.

Las Vegas

This command line option, indicated by the "L" option is only supported by *Klondike*. Since I felt that the Popular style of play would be the preferred style, I made it the default mode of play even though it is not the strict rules of the game. To start the game with strict rules, specify this option.

American

This command line option, indicated by the "A" option is only supported by *Poker*. That game uses the English method of scoring hands by default, but to start the game up using the American method of scoring, specify this option.

Installation - MM/1

Quick Startup

If you want to run the games directly from a floppy disk or want to get the game running as quickly as possible, you can run your game directly from your backup copy. Here's how.

First, boot OS-9. Replace the diskette in the /u0 drive with the backup copy of the game program. To run the game program, enter the following commands:

```
$ chx /u0/cmds  
$ klondike
```

OS-9 Level 2 Version

This version is distributed on either a single 35 track SS 5.25" *flippy* diskette or by request on a single 80 track DS 3.5" diskette. Files on Side A of the disk are:

File Name	Description
-----	-----
CMDS/Pyramid	Game program
CMDS/Klondike	*
CMDS/Spider	*
CMDS/Poke	*
CMDS/Install	Installation Program

Files on Side B of the disk are:

File Name	Description
-----	-----
CMDS/Canfield	Game Program
CMDS/Solitaire	Menu Program
CMDS/SetUp	Set Up Program
CMDS/CSave	SAVE command
CMDS/ICONS/icon.cardgame	Common MV Icon
AIFS/aif.pyr.rgb	Multi-Vue AIF, Pyramid
AIFS/aif.pyr.cmp	*
AIFS/aif.klo.rgb	Multi-Vue AIF, Klondike
AIFS/aif.klo.cmp	*
AIFS/aif.spi.rgb	Multi-Vue AIF, Spider
AIFS/aif.spi.cmp	*
AIFS/aif.pok.rgb	Multi-Vue AIF, Poker
AIFS/aif.pok.cmp	*
AIFS/aif.can.rgb	Multi-Vue AIF, Canfield
AIFS/aif.can.cmp	*
MODULES/blgames	Boot List
MODULES/blgames.35	*
PATCHES/grfint_fix.mod	Patch File
PATCHES/windint_fix.mod	*
PATCHES/init.scr	*
PATCHES/windows.scr	*
PATCHES/fstgrf.ar	Patch file archive
startup.single	System Startup File
startup.combined	*

Installation - CoCo3

NOTE

If you had requested that your software be shipped on an 80 track DS 3.5" disk, then there is no Side A or Side B, as 3.5" disks cannot be *flipped* and indeed, there is no need to. The 35 track SS 5.25" format will not hold all files on a single disk and to cut production costs, a special disk which has files on both sides was used.

First thing to do is make a backup copy of your game disk. If you are unsure how to do this, I suggest reading about the OS-9 backup command in the appropriate OS-9 manual. Once you have made a copy, place your original disk in a safe place. Next place the backup copy in a floppy drive. The following instructions assume that the floppy drive is called /d0 and that you plan to copy the game files to a device called /dd. This device can be a hard drive or another floppy drive. If these device names do not correspond with your system, simply replace these device names with your device names.

Automatic Installation

Installation can be easy if you use the provided Installation Program, Install. Put Side A of your backup copy in drive /d0 and enter the following commands:

```
OS9: chx /d0/cmds  
OS9: install /dd
```

You do not have to specify the device name on the second command line, if you do not specify it, you will be prompted for it. You will also be asked whether or not you want to install the optional Multi-View relate files. At the appropriate time during the installation you will asked to remove the diskette, "flip it over" and press ENTER when ready to proceed. **If you are installing your software from a 35 track SS 5.25" floppy disk be sure to follow those instructions!** If you are installing your software from an 80 track DS 3.5" disk you may ignore this message. Press ENTER and the installation will continue. If you have problems, you can resort to a manual installation, which instruction follows.

Manual Installation

In the following instructions on manual installation and running the game programs, only one of the variations is described. To install or run the other variations, substitute the name of the other program files. If your software is on a 35 track SS 5.25" floppy disk, you will need to refer to the file list above to determine which side you need to have in your disk drive. Copy the main program binary file to your normal CMDS directory by entering the following command:

```
OS9: copy /d0/cmds/pyramid /dd/cmds/Pyramid
```

Installation - CoCo3

You can copy the program binary to ANY directory you wish, but OS-9 convention is that all executable binaries are in a directory called CMDS. This can be /dd/games/CMDS or it could be /d0/CMDS. In order to run it, the game program must either be in your *current execution directory* or already pre-loaded into memory. If not, you must change your current execution directory to the directory that contains the game program. As in the first example location mentioned, /dd/games/CMDS, you would perform a:

```
OS9: chx /dd/games/cmds
```

This is the only file required to run the game if you plan to run the game from the Shell command level. All game programs can be run at the OS-9 shell prompt from any type window, as long as a free non-VDG type window device is available for allocation. It also works fine as a GShell (Multi-View) application and an AIF and ICON are supplied for this purpose. Actually there is only one common ICON file and two AIFs for each variation. If you wish to have the capability to run as a GShell application, perform the following steps. Copy the ICON by entering:

```
OS9: chd /dd/cmds/icons
```

```
OS9: copy /d0/cmds/icons/icon.cardgame icon.cardgame
```

Then choose which AIF you want to use. Then enter **one and only one** of the two commands to copy the appropriate AIF:

```
OS9: copy /d0/aifs/aif.sol.rgb /dd/aifs/AIF.sol
```

```
OS9: copy /d0/aifs/aif.sol.cmp /dd/aifs/AIF.sol
```

Note that the output filename **must always** be the same for any of the five game variations, no matter which of the two possible input files you need to use. Altering the output file name in any way may cause the game program to be inaccessible from GShell. Also, the directory /dd/aifs is only a suggestion. You can actually put the AIF in any directory on any disk you want.

Concerning the AIFs I have supplied on the Game Disk, the difference between them is line 2, the parameter line. The game program checks for a single command line parameter. A value of R or r causes a default monitor type of RGB. A value of C or c causes a default monitor type of CMP. If no parameter is specified, the program will ask for the monitor type only once in an overlay window at the start of the game.

Some variations support other options. They may be added to line two of the AIF as desired.

Installation - CoCo3

NOTE

If the AIF has a question mark in line two and it will cause GShell to prompt for command line parameters in an overlay window **only** if you are running GShell+ V1.24 or greater. In this overlay window any or all command line options for the variation you are running may be specified.

Standard Fonts, Pointers and Patterns

All game programs in this package run in an OS-9 Graphics Window. They also use the standard mouse pointer and standard fonts, and some even use the standard four color patterns. Therefore, the following commands must have been performed prior to running any of the game programs.

```
OS9: merge /dd/sys/stdfonts >/w
OS9: merge /dd/sys/stdptrs >/w
OS9: merge /dd/sys/stdpats_4 >/w
```

These are normally performed when you boot OS-9 by placing them in your /dd/startup procedure file.

Patch Files

The Patch Files in the PATCHES directory are provided for your convenience. Most are in *modpatch* format and are self-documented. To permanently apply a modpatch script type of patch you will need a *save* command. This command was not supplied with the base OS-9 system. I have included a public domain version of a save command that I wrote to facilitate this process. It is called CSave and is in the CMDS directory. You will note that there is a Patch File for GrfInt and WindInt, both of which fix the same problem that both modules exhibit. As I have already stated, WindInt is **NOT** required to run any of the game programs in this package, but since WindInt is a superset of GrfInt, all game programs will run just fine in a Multi-View environment.

The patch to GrfDrv that will speed up graphics operations by as much as 100% is in *IPatch* format and requires the IPatch utility to apply. Call or write to me if you do not have this utility and would like a copy.

How to Run a Game Program

To run the game program from any standard window type device, enter the following command:

```
OS9: pyramid
```

Installation - CoCo3

Alternatively, to run from any type window, including a VDG type window, enter the following command:

```
OS9: pyramid <>>>/w&
```

This format, however, requires that a free, non-VDG type window device available, plus it has to have been patched to be a Type 2, 80 column 24 row hardware type window by default.

As mentioned earlier, all game programs accept a command line parameter to specify the monitor type, *r* for RGB, or *c* for Color Composite Monitor. For example, to start up with monitor type RGB selected, you would enter the following command.

```
OS9: pyramid r
```

There is also a *Menu* program provided which can be used to access all Game Variations. It is called Solitaire. It is provided primarily to be used as a menu program for a standalone Games Boot disk. Instructions on how to make a standalone Games Boot disk are later in this manual. The Menu program can be used at the Shell Command level, though. Run it with the following command:

```
OS9: solitaire n
```

The "N" command line option tells it **not** to run the special SetUp program, which sets up your system for your monitor type and the optional Hi-Res Interface. Presumably, this would normally already be done in your normal boot process. If not, you can leave the command line option off and the program SetUp will be run. Usage of the Menu program is pretty much self-explanatory. Highlight the name of the game program you wish to run with the mouse cursor and click the mouse.

The Solitaire menu program has a *point and shoot* user interface. All you do is move the mouse cursor on top of the name of the game you wish to run. The name will change color from white to red. Click the left mouse button while the name of the game program is red and the menu program will run the requested game program. The menu program automatically determines your current monitor type and supplies the appropriate command line option for monitor type when the requested game program is run. No other command line options are specified by default. There are three bytes of patch area in the program where you may place command line options.

The three spaces (HEX \$20) at offsets \$005F, \$0060, and \$0061 are provided for you to specify any command line options. These will be sent to ANY game program that you may run, but don't worry, none of the game programs mind if unrecognized command line options are specified, they will simply be ignored. For example, if you do not care for the card animation that is default for those game programs that support it, put either a lower case *i* (HEX \$69) or an upper case *I* (\$49) in offset \$005F.

Installation - CoCo3

If you do decide to patch the menu program in this manner, be sure to not change any other bytes and expect the menu program to work as expected. Also, be sure to re-verify the module CRC after patching it!!

Monochrome monitors are not specifically supported but can be used with the right system wide defaults. Type:

```
OS9: montype m
```

prior to running the game program, and then, when running the game specify RGB as your monitor type.

Installation - CoCo3

Command Line Options

All game programs support a variety of command line options. All command line options may be specified in either upper or lower case. If multiple options are specified, do **not** separate them with spaces or any other delimiter. Any invalid or otherwise unrecognized options are ignored and no error is signalled. This is a description of those options.

Instant Move

This option is requested by including an "I" on the command line. It negates the default action of *Animation*. All game that support animation are in Animate On mode by default. If you do not wish to have the game to animate the movement of cards then you may turn it off by specifying this command line option. The games that support this option are *Klondike*, *Spider*, *Poker*, and *Canfield*.

Assist On

Some variations have an optional Assist Mode. By default this feature is in the Assist OFF state. To start the game program with this state on the Assist ON state, specify the "A" command line option. The games that support this option are *Pyramid*, *Klondike*, and *Canfield*.

Variation

Some games support a variation of the rules for the game in question. By default strict rules are in effect by default. To start up the game in the variation mode, specify the "V" command line option. Games that support this option are *Pyramid* and *Poker*.

Las Vegas

This command line option, indicated by the "L" option is only unsupported by *Klondike*. Since I felt that the Popular style of play would be the preferred style, I made it the default mode of play even though it is not the strict rules of the game. To start the game with strict rules, specify this option.

American

This command line option, indicated by the "A" option is only supported by *Poker*. That game uses the English method of scoring hands by default, but to start the game up using the American method of scoring, specify this option.

Installation - CoCo3

Quick Startup

If you only have a single floppy disk system or want to get the game running as quickly as possible, you can run your game directly from your backup copy. Here's how.

First, boot OS-9. The standard graphics font, the standard pointers and the 4 color standard patterns files must have been installed. (*See the comments on that in a previous section.*) The Graphics Shell, GShell is not required but this game can be quick started from the GShell. Instructions on that later. To run it from the Shell prompt, remove your boot disk, replace it with the backup copy of the game disk. If your software is on a 35 track SS 5.25" disk, you will have to refer to the file list to determine which side you need to be on. To run the game program, enter the following commands:

```
OS9: chx /d0/cmds  
OS9: chd /d0  
OS9: pyramid
```

The game will start. You will only be able to run the 80 track DS 3.5" disk software distribution directly from the Graphics Shell, GShell. Place the backup copy of the game disk in your disk drive. Then perform the following steps:

1. Click on the Disk menu, and select the *Set Execute* menu item. In the overlay window that will pop up enter the string:

```
/d0/cmds
```

The device name should be the name of the device that contains you Games disk backup. If yours is not called /d0, substitute the name of your device for /d0.

2. That overlay window will go away, then click on the disk device icon for your 3.5" disk device. Soon, you will see a set of icons in the right-center part of the screen. One of the icons will be a folder icon with the word "AIFS" (or whatever name you have assigned to the directory that contains your game icons) underneath it. Click the mouse inside it. It will change color. Click inside it again. After the disk works for a few seconds, you will see the Game Icon appear. Click the mouse inside it. It will change color. Click inside it once more, and the game will start.

Pyramid

Basic Game Rules

Pyramid is a very easy and fun variation of Solitaire. After the deck is shuffled the *Tableau* is setup. With this variation, the shape of the *Tableau* is the origin of its name. The *Tableau* is built by dealing seven rows of cards face up on the playing area. The first row is at the top and has only a single card in it. The second row has two cards in it and they are placed on the lower half of the first card, with only the top half of the first card still exposed. The left-hand card in the second row covers the left lower corner of the card in the first row, and the right-hand card in the second row covers the right lower corner of the card in the first row. Next a third row is placed in a similar fashion, so that the third row has three cards. This continues until the bottom rows (the seventh row) of cards contain seven cards. Thus the entire *Tableau* contains 28 cards, leaving 24 cards in the Deck.

The basic play operation is to match any two cards that are *available*, so that the values of the two cards add up to a sum of 13. Aces have a value of one, Jack, Queen, and King have values 11, 12, and 13, respectively. All other cards have their face value. Therefore, Aces match up with Queens, 4's match up with 9's, etc. The two cards are then picked up and placed in a discard pile. Since Kings are 13 themselves, they do not need to be matched with any other card and may be picked up singly.

What determines if a card is available? Any card on the *Tableau* that does not have any cards overlapping it is available as well as the top card on the Talon pile. So, when the game first starts, only the cards on the bottom row are available. Cards along the two side edges (except the top card) each has only one card on them. Cards on the inside the *Tableau* and the top card each have two cards on them. Once those cards on top of other cards are removed by a matching play, then the cards they were on become available.

If no matches can be made, cards from the Deck are turned over one at a time onto the Talon pile. Only the top card on the Talon is available for matching. As with available Kings on the *Tableau*, a King on the top of the Talon may be picked up and discarded immediately. The Deck is only gone through once. I also support a variation that allows the cards in the Deck to be turned over three cards at the time and the Deck may be gone through as many times as desired until play is exhausted. *Pyramid* is very difficult to win. All is determined by the luck of the draw that determines the layout of the *Tableau*.

All possible matching plays do not have to be made before turning cards over on the Talon. Likewise, Kings do not have to be immediately picked up when they become available on the *Tableau* or appear on the Talon. It is advisable to make all possible plays.

In the variation, if no matching plays are made during a pass through the Deck, it is assumed that no matching plays remain and you lose the game.

To win the game you must match and discard all cards in the *Tableau*. This means that the last card in the *Tableau* (which was the first card turned over and placed on the *Tableau*)

Pyramid

must be matched with a top card on the Talon, since it is the last card left in the Tableau. When the last card on the Tableau is a King it needs no match.

Playing the Game Program

Each game begins with a shuffle. The Tableau for your first game will then be set up for you. The Tableau is in the center of the screen and the Deck and Talon are on the left side of the screen.

To select a card from the Tableau, simply point to it and click the mouse. To select the top card on the Talon, point to it and click the mouse. When you select a card either in the Tableau or on the top of the Talon, it is highlighted by changing its border from black to red. To match that card with a second card, the second card is selected in the same manner as the first.

Once you have selected two cards, the game program takes over. If the move is valid, both cards are removed. If the move is invalid, i.e., the values of the two cards do not add up to 13, a message is displayed in an Overlay Window in the center of the screen for a few seconds. When it disappears, both cards are de-selected.

To turn over a card or cards from the Deck to the Talon, point to the red pattern shaded Deck and click the mouse. If you click on the Deck while you have a card selected, either on the Talon or on the Tableau, it will be automatically de-selected and then the third Deck card is turned over.

If you select the wrong card or change your mind after selecting a card, you may manually de-select it by clicking on the card again. Its red border will go away.

Pyramid also supports a short cut method of making plays. Regardless if the first card you choose is on top of the Talon or is a free card on the Tableau, if you select that card by *double clicking* on it, and there is only *one possible valid move* for that card, then that second card is automatically selected for you, and the move is made as if you single clicked on the first card and then single clicked on the second card. The second card can also either be the top card on the Talon or a free card on the Tableau. The double clicking method is especially helpful if you use a trackball for a mouse device.

To qualify as a double click on the first card, the card must not already be selected. If it is, single click on it to de-select it first. The two clicks of the left mouse button must occur within one quarter of a second of each other. This sounds like a very small length of time, but it is really easy to do. Also, remember that there can only be one and one only valid move that can be made with the card that is double clicked. For example, there is a free Queen on the Tableau and there are two free Aces on the Tableau. If you double click on the Queen, nothing will happen since there are two possible moves for the Queen and *Pyramid* does not know which Ace you want to match to. You can double click on one of

Pyramid

the Aces, though, since there is only one Queen that can match with it. You can double click on either of the Aces and the move will be made.

When the Deck is empty, it is depicted as a White box. In the variation game, to turn the Talon over and go through the Deck again, click inside the empty Deck. Clicking inside the empty Deck in the normal game signals that you have no more plays and wish to concede the game. Selecting "Re-Deal" at any time will also concede the current game.

Pyramid keeps track of how many games you have won and how many you have lost. At the end of each game, either a win or a loss, your current standings are displayed in a dialog box.

Some Playing Tips

Always try to match up two cards together on the Tableau. For example, if there are a 10 and a 3 that are available on the Tableau and the top card on the Talon is a 10 or a 3, do not use the Talon card to match. Use the two available cards on the Tableau. This leaves more cards in the Deck to match with, which you may need later. After all, the object is to dismantle the Tableau, not to use more cards from the Talon/Deck.

Always check to see what cards will be made available when a move is made. As an example, let's say that two nines are available and that if the one on the left is picked up a four will be made available. If a four shows up on the talon or there is an another four on the Tableau that is already available, match it with the nine that will make the other four available. This will create a follow-up move of the other nine with the newly available four.

When a King comes up on the Talon, click on it to discard it. This not only exposes the card underneath it for possible play but also causes different cards to come up after that point in the Deck the next time through, since three cards are turned over each time the Deck is selected.

Pyramid

The Action Menu

Re-Deal

This item assumes you wish to concede the current game. It is counted as a game lost. An Overlay Window displays the current standings of how many games you have won, how many you have lost or given up, and the percentage you have won. A few seconds later, the screen is cleared and a new game set up.

Undo

If you made a match of two cards on the Tableau and wish to put them back you may do so before making another play by selecting the Undo menu item. Only a match of two cards from the Tableau qualifies for this option. A match of one card from the Tableau and the top card on the Talon cannot be UNDOne. Sorry, that is just too much on the verge of cheating! A King picked up from the Tableau may also be UNDOne, but as before, a King picked up from the Talon may NOT be UNDOne. The word Undo will be displayed in a smaller font if you have nothing to undo. If you do have something to Undo, it will be displayed with the same font as the other menu items.

Standard/Variation

This menu item is a *toggle switch* to switch between the Standard rules and the Variation rules. When the pull down menu is displayed the value of this item is the current type of game being played. To change the game type, select this Menu Item and click the mouse. You will be asked if you are sure or not as selecting this option resets all game counters and starts a new game, ending the current game.

Assist On/Assist Off

This Menu Item is also a *toggle switch* to either turn *Assist Mode* ON or OFF. When the Pull Down Menu is displayed, the value in this Menu Item depicts the current state of the Assist Mode. To change to the alternate mode, point to the item and click the mouse. A message in a dialog box will notify you of the new state of the Assist Mode.

What does Assist Mode do for you? Two things. First it helps you to not miss a move when you ask the game program to turn over the Deck. When you click on the Deck, *Pyramid* checks to see if there are any valid moves available. If there are, it asks you if you're are sure or not whether you want to go ahead and turn over the Deck. Secondly, it also helps to not make a *dumb move*. Any time you ask *Pyramid* to match the Talon card with a card on the Tableau, if there is a Tableau match instead of the Talon card, you are also asked if you are sure or not whether you want to make that play. It is usually advisable to match a Tableau card with another Tableau card instead of the Talon card.

Pyramid

By default Assist Mode is off when the game program begins, but this can be overridden by a command line option.

Help

Clicking on this menu item causes an Overlay Window to be displayed with a brief display of the rules of the game. You must click the mouse button to resume play.

Quit

To quit play and exit the game program, you can select either this menu item, or click on the *Close* icon. When you select to quit you are given the option of actually quitting the game program or returning to the current game by options presented in a dialog box.

Klondike

Basic Game Rules

This variation of *Solitaire* is so popular it has come to be known by many as simply *Solitaire*. The proper name of this version of Solitaire is *Klondike*. It is occasionally referred to incorrectly as *Canfield*, probably due to its similarity to the Canfield variation. Klondike is also known by such local names as Fascination, Demon Patience and Chinaman. The rules of the game as follows.

After shuffling a single standard deck of 52 cards, the *Tableau* is built. Deal the first card face up. To the right of it, deal the next six cards face down in rows next to the first. Skip the first row, which has a card already face up and deal the next card on top of the second row face up. Follow with cards dealt face down on top of the remaining five rows. Continue in this manner until the Tableau consists of seven rows of cards with 1, 2, 3, 4, 5, 6 and 7 cards in them, left to right. The top card on each pile is face up while the rest are face down. (I will occasionally refer to these face down cards as *hole* cards.)

The Foundations are four piles that are built onto as game play proceeds. They all start each game empty. Then when they become available, each pile starts with an Ace and is built on by cards of the same suit of the next higher rank. Thus each pile in the Foundation will eventually consist of an Ace followed by all the other cards in the same suit in order from Ace to King. Cards may be moved to the Foundation from either the Tableau or the Talon, but only one card with each move. Only the top card of a Tableau row or the Talon may be moved to a Foundation. Once a card is placed on the Foundation, it may not be removed.

The play of the game consists mainly of *Building* with the Tableau. On the uppermost card of a Tableau pile may be placed a card of next-lower rank and opposite color. The rank goes to King being the highest. This card may be the top card on the Talon or a card from another row of the Tableau. If the card comes from another Tableau row, then it must be the bottom face up card and ALL cards (the card to be moved and all on top of it) must move together. If a card or cards are moved from a Tableau row and there are any face down cards left in that row, Then the top-most face down card is turned face up on the row, thus becoming available for play.

As already alluded to, the top card on the Talon is always available. The top card on a row of the Tableau or the Talon may be played to a Foundation pile. You don't have to move a card to a Foundation when it becomes eligible, but Aces may not be played to the Tableau.

If a space occurs in a Tableau row, then only a King may be placed there, either as the top card from the Talon, or the top card from another row in the Tableau. As before, with Tableau to Tableau moves, **all** cards in the row must move together even in a King to Tableau Space move.

The Hand is turned up, one card at a time, and is played through only once. No re-deal is allowed. The game is won if all 52 cards end up on the four Aces Foundations. The astute

Klondike

observer will realize that if all cards of the Hand are played from the Talon, and all face down cards on the six rightmost rows in the Tableau are turned face up, the game is essentially won. At that point what would remain would be to move the cards from the Tableau to the Foundations, one card at a time.

While it is usually advantageous to always play all valid moves, it is not required, and indeed can happen often, as you may not always spot all valid moves.

My experiences are that the *Popular* style to play Klondike is to turn the Hand **three** cards at a time, and the Hand can be re-dealt over and over, until no play can be made. I have also heard of a version played in Las Vegas where a player *buys* the Deck for a dollar a card. The Hand is dealt through one card at a time, and no re-deal is allowed, as in Frey's rules. Each card placed on the Foundation earns the player five dollars. Therefore, the worst one can do is to lose \$50, and the best one could do is to win \$208.

I support both variations of play. The standard rules, I refer to as Las Vegas style, and the variation I described is referred to as Popular Style.

Playing the Game Program

Each hand starts with a shuffle. The deck is shuffled seven times to assure randomness. The Tableau is then set up. Game play is very simple and intuitive, but I will describe it in detail, here.

One comment on the display of cards on the MM/I monitor. No attempt is made to graphically represent the existence of the face down cards that are underneath the right-hand six rows. Instead, a numeral is displayed above each row that is the number of face down cards in that row. At the start of the game, these numbers are 1 through 6 starting with the second row.

As cards are moved onto the top of the Tableau rows in building moves, it is traditional not to completely cover up the card underneath it. In this manner, the cards work themselves down, halfway on top of the card above it on the screen. So, the point is, the card at the bottom of the screen is the **top** card of the pile. The card at the top of the screen is the bottom card of the pile.

All you really need to know about is the top card and the bottom card of the piles, since the top card (at the bottom of the screen) can be moved to an Ace Foundation if it qualifies, and the bottom card of a pile (at the top of the screen) **along with all cards on top of it** (cards going from the top of the screen to the bottom of the screen) may be moved to another Tableau row.

So, in order to avoid confusion and make the following instructions simpler, when I refer to the *bottom* card, I am referring to the card in a row that is nearest to the bottom of the

Klondike

screen. When I refer the *top* card, I am referring to the card in a row that is closest to the top of the screen.

Each building move consists of two actions. First selecting the card to move then telling *Klondike* where to move it to. There are two types of Tableau cards that may be moved, the bottom card of a row or the top card of a row (along with all cards that may be displayed underneath it on the screen). When you select a card it will be highlighted with a red border. In case you change your mind before moving it, de-select the card(s) by clicking on it again. The red border will go away.

If the card you wish to select is the bottom card of a row of which has more than one card (in order to move it to a Foundation) or is the only card in the row at the top of the screen, move the mouse cursor somewhere inside the card and click the left (or only) mouse button.

If it is the top card in a row that contains more than one card, you must point somewhere inside the uppermost card. Remember this is actually the bottom card in the *stack* of cards as cards are placed on the Tableau on top of the previous card, working their way down. There will be a red border drawn around all cards in the row.

To move the selected Tableau card(s) point to the location you want to move them to and click the mouse button. Only a valid move will cause an action to occur. Attempts at an invalid move will be ignored. Remember, if you have selected the only card in a row it may be moved to another Tableau row or to the Foundation. If the selected Tableau card is the bottom card in a row that has more than one card, that card may **only** be moved to the Foundation. If you have selected a row that contains more than one card, the entire row of face up cards may **only** be moved to another Tableau row.

If you are moving from a row that has hole card(s) left, the top one will be automatically turned over, thus decrementing the number above it. If there are no face down cards left in the row (or the row you're moving from is the left most row, which never does have and face down cards), a white box will be drawn indicating a *Space* row in the Tableau. As mentioned the number over the rightmost six rows indicates how many face down cards there are in that row. As they are turned over, this number counts down to zero.

Once there are no Tableau to Tableau or Tableau to Foundation moves left, you must start turn the Hand over to the Talon. To turn over the Hand to the Talon, point the mouse cursor to the Hand and click the mouse button. If you are playing the Popular Style of game play, cards are turned over three at the time from the Hand to the Talon, but the two intermediate cards are **not** displayed, as you aren't supposed to know what they are.

If you are playing the Las Vegas Style of play, then only one card is turned over at a time. If the card being turned over represents the last card in the Hand, the Hand changes to a white box, instead of its normal red cross-hatch background, to indicate that it is now currently empty. If you are playing the Popular Style of play, to turn the Talon over and

Klondike

play through the Hand again, click inside the empty Hand. If you are playing the Las Vegas Style of play, when you click inside the empty Hand it is assumed you have made all possible plays you wish to make, and the score is tallied.

To select the top card on the Talon in order to move it, point to it and click the mouse. A red border will be drawn around it. To move it, point to where you want to move it to and click. It can be moved either to the Foundations or on top of the bottom card of one of the Tableau rows. After a Talon card is moved, the next card under it on the Talon will be displayed unless the Talon is now empty. If the Talon is now empty, a white box will be drawn, just as an empty Hand is depicted.

To move a singly selected card to the Foundations, after you have selected the card to move, then point to one of the four red boxes to the right of the screen and click. It doesn't matter which suit goes in each box, but once a suit is started in a Foundation box, only cards of that same suit may be placed on that Foundation. And as mentioned before, only a single card at the time may be moved to a Foundation.

As with the Pyramid variation, certain types of moves can be made by *double-clicking* on a single card. As with Pyramid, to qualify as a double click, the card being clicked on must not already be selected and the two clicks must occur within 0.25 of a second of each other.

If the card being double clicked on is the top card of the Talon and the card can be moved to the Foundations, then it is. If the card can't be moved to the Foundations, and there is ONE and ONE ONLY move of the card to the Tableau, then that move is made.

If the card being double clicked on is the bottom card of a Tableau row that contains more than one card and that card can be moved to the Foundations, then it is moved there. This is the **only** move that the bottom card in a Tableau row of more than one card can be moved to!

If the card is the only card in a Tableau row and that card can be moved to the Foundations, then it is moved there. If it cannot be moved to the Foundations and there is ONE and ONE ONLY move to another Tableau row, then that move is made.

If the card being double clicked on is the top card in a Tableau row that contains more than one card and there is ONE and ONE ONLY move to another Tableau row for that group of cards, then the move is made. You cannot move more than one card at the time to the Foundations.

The main thing to remember when using double clicking to move a **single** card, either the top card on the Talon, the bottom card on a Tableau row that has more than one card, or a card that is the only card on a Tableau row, and that card can be moved to the Foundations, **then it will be moved to the Foundations, even if there is a single move of that card to the Tableau!!**

Klondike

The game is ended by either winning by placing all cards on the Foundations or by losing. Losing depends on which style of game you are playing. In the Popular Style, if you turn over the entire Hand without making a play **anywhere**, it is assumed that the game is over the next time you try to turn the Talon over, even if you had ignored any valid moves. Whether you have won or lost, an Overlay Window will indicate how many games you have won, how many you have lost, and a percentage of games won.

If you are playing the Las Vegas Style of play, once you click on an empty Hand, the game is over, since you cannot go through the Hand but once. Whether you won or lost by moving all cards to the Foundations or not, your score is tallied. You are told how much you won or lost by multiplying \$5 times each card moved to the Foundation and subtracting \$52 from that. A running total of winnings or losses is also kept. At the end of each game, this information is displayed in an Overlay Window.

Some Playing Tips

Klondike is probably one of the most popular versions of Solitaire. Many people learn how to play it while they are children. If you have played Klondike since you were a child, then you probably have a good idea of the way it should be played in order to maximize your chances of winning. This section will not only help those who are just learning Klondike to play a more intelligent game, but also those who are familiar with the game who may have forgotten some of the finer points of play.

I have found that there are many schools of thought when it comes to strategy of play at Klondike. Mine may not be the best, but I think it is one of the most statistically sound.

One thing to remember is to play cards to the Foundation when you can. There are a few occasions, however, when it is advantageous to delay a Foundation move. For example, let's say that the bottom card a Tableau row is a red five. Another Tableau row has a single four of clubs and there are some "hole" cards face down underneath it. The Clubs Foundation is also built up to a three of clubs. Now, normally you would play the four of clubs on the Tableau to the Foundations. In this case, it could be advantageous to play it onto the red five on the Tableau in order to uncover one or possibly more of the hole cards. It is usually wiser to uncover hole cards at the cost of not moving a card or cards to the Foundations.

Similarly, say you have two Tableau rows with only one card on them and those cards the same rank and color and there is a move for that rank and color, either to the Foundations or some other Tableau row. In this case, it would be wiser to move the card that has more hole cards underneath it. Klondike is often lost because there are hole cards that never get into the play of the game.

The Action Menu

New Game

This item assumes you wish to concede the current game. If you are playing the Popular Style, it is counted as a game lost and an Overlay Window displays your current standings. If you are playing the Las Vegas Style then your winnings or losses for the current hand and totals to this point are displayed in a similar Overlay Window. A few seconds later, the screen is cleared and a new game set up.

Popular/Las Vegas

This menu item is a *toggle* switch to go back and forth between the two types of games supported. When you click on Action, the item in the second row of the pop-up menu indicates the **current** style of play. (Note that the current style of play is also always displayed on the lower left of the main screen.) By default, Klondike starts up in the Popular Style. This can be altered with a command line option described in the Technical Notes. To switch to the Las Vegas style of play, select the Popular item. It will switch to Las Vegas. If you then select the Las Vegas menu item, it will switch back to the Popular style. Since changing the style of play resets all game counters, you are given the option of continuing with the change or resuming the current game with no change with a dialog box.

Assist On/Assist Off

This menu item is also a *toggle* switch to turn Assist Mode on or off. By default, Assist Mode is off when the game first starts. As with game style, this can be modified with a command line option described in the Technical Notes. Also, as with game style of play, this option in the pop-up menu indicates the **current** mode of play. Changing this option during a game has no effect on that game, other than turning on Assist Mode. After changing the mode, the play of the current game continues.

Assist Mode provides two types of *sanity checks* for you. First, it helps you to not miss possible moves. It does this every time you click on the Hand to turn over cards to the Talon. If there are **any** possible moves available, a dialog box asks you if you are sure you want to go ahead and turn the Hand card(s) over. If you want to ignore the fact that there is still at least one move left and go ahead and turn over the Hand, click inside the **YES** box. To not turn over the Hand cards and give yourself a chance to go ahead and make the move or moves still left, click inside the **NO** box. Klondike does **not** tell you what the possible move or moves are. It is up to **you** to find them!

The second sanity check is one for what I call *dumb moves*. As with the valid move check, a dialog box allows you to continue and make the move or not. As before click on **YES** to go ahead and make the move, or click on **NO** to not perform the move. With either valid

Klondike

moves or dumb moves clicking on **NO** will **not** de-select any cards you had selected to move. To de-select them you will have to click on them again.

What are these dumb moves? They are:

1. A move from the Talon to the Tableau if the Talon card may also be played to a Foundation.
2. A move of a single card on the Tableau to another row of the Tableau when that card may also be played to the Foundation.
3. A move from the Talon to the Tableau if there is also a valid Tableau to Tableau move is available.
4. A move from the Tableau to another Tableau row and there is another Tableau move to the same location which is over a larger number of hole cards.

Assist Mode **can** get on your nerves! Sometimes it is hard to spot the move it says is there! Sometimes, when it is saying your move is a dumb move, it may really make sense. It can help you win more games than if you are not using it.

I think you will also be surprised on just how fast your MM/I can determine if there is a move available. In the time it takes to click on the Hand and the next card is displayed on the Talon **every** possible move is checked for validity. Every time you click to make a move all possible moves are checked to see if a dumb move is being attempted. It is so quick, that you cannot tell the difference in time if you do not have Assist Mode on. Try it!

Animate On/Animate Off

By default, when you start Klondike, it is in *animate* mode. As with the other options, you can override this with a command line option. As with the other options, the value displayed in the Menu Item is the **current** state of animation. Animate ON mode means that in a card move from the Talon to the Tableau or the Foundations or in a move of a card from the Tableau to the Foundations, the card will appear to *move* from one location to the other. To turn it off, select the Animate On menu item. It will change to Animate Off. To turn the animation back on, select the Animate Off menu item.

Help

Clicking on this menu item causes an Overlay Window to be displayed with a brief display of the rules of the game. You must click the mouse button to resume play.

Quit

To quit play and exit the game program, you can select either this menu item, or click on the *Close* icon. A dialog box gives you the chance to resume the current game or actually quitting the game program.

Spider

Basic Game Rules

Growing up I learned and enjoyed several variations of this card game or a single player. For some reason, I seemed to have missed one. Until now. It came to light in a conversation with Dave Myers of CoCoPRO!. He mentioned that he and his wife had seen and played a version of Solitaire that they grew to enjoy playing, a variation called *Spider Solitaire*. So I looked it up. Sure enough, the game is fully described in all books on the subject of card games. One book states that Spider is perhaps the best of all solitaires because skillful play can overcome the luck of the draw. I will refer to it and this card game and corresponding game program simply as Spider from now on. The rules of the game as follows.

After shuffling two standard decks of 52 cards each together, TEN cards are dealt face down in a horizontal line. All dealing should be done from left to right. Three more rows of ten cards are dealt face down on top of them. Next deal one more card face down on just the four leftmost rows. Lastly, deal a row of ten cards face up. Thus the *Tableau* consists of 54 cards in ten rows. Actually this layout is a combination of the *Tableau* and the *Foundation*. The first four rows left to right have 5 face down cards with one face up card on top of them. The other six rows have 4 face down cards and one card face up on top of them. Since a double deck consists of 104 cards, that leaves 50 cards left in the Hand.

All building is done on the Tableau. Any available card may be placed on the top card of any other row if the card being moved is of the next lower rank. Rank starts with the King as high, down to Ace as the lowest. Suit does not matter for building moves, but it is desirable. Any card at the top of a row is available for moving along with any number of the cards below it that constitute an ascending sequence in the same suit. So you see, suit does matter in a way, only runs of cards in the same suit may be moved together.

For example, if there is a 3 of diamonds on the top of a row, and below it, in order are a 4 of diamonds and a 5 of diamonds, then either the 3, the 3 and the 4, or the 3, the 4 and the 5 may be moved as a unit. The card that this unit can be moved on top of depends on how many you move. If you just move the 3, then it must be placed on a 4. If you move the 3 and the 4, then they must be put on top of a 5. Similarly, if you move the 3, 4 and 5, they must be moved on top of a 6. Again, the suit of the card(s) being moved is irrelevant to the suit of the card it/they are being moved on top of, but it should be obvious to the astute observer that it is to your advantage to move cards to a card of the *same suit*, since that adds a card to the number that may be moved as a unit. In this example, if the 5 to be moved was a club (any suit other than diamonds), then it would not be eligible to be moved with the 3 and 4 of diamonds.

When all face up cards have been removed from a pile the top face down card is turned over. It thus becomes available. When all face down cards have been turned over in a row, and the last face up card from that row moved, that row now contains a *Space*. All Spaces **must** be filled before any more cards are dealt from the Hand. It is filled with any number

Spider

of cards of a run of the same suit from another Tableau row. **Spaces are very valuable in Spider!** First of all, they provide you with the **only** means of moving a King from another Tableau row, but don't be so quick to do that every time since that row then becomes only more difficult to recover and Spaces are very useful to interchange cards between rows to get suits together.

When you come to a standstill with building on the Tableau, another row of ten face up cards is dealt to the Tableau rows from the Hand. As already mentioned, you fill all Spaces first before dealing another row from the Hand. Remember that the building rule states that an available card *may* be moved, it doesn't say that all valid moves **MUST** be made. So, you really determine whether or not a standstill condition really occurs. If there are no moves period, then you must deal out another row of ten cards. Since it advantageous to get **all** cards in play as soon as possible, this means you should make all possible legal moves in order to uncover the face down cards quickly.

Additional rows of ten cards are dealt with each successive standstill until the deck is completely dealt out (5 times). The next standstill determines the end of the game and a loss. There is not redeal.

You may ask, well how does one win this game? Cards may be removed from the Tableau and discarded if one key criterion is met. They have to be all thirteen cards in a single suit, all in ascending order from the top card (King) to the bottom card (Ace). All thirteen are removed from the Tableau as a group and never returned to play. Note that there may or may not be cards left in the row that these are removed from. Note also that you are not required to remove such a set of cards immediately upon them being formed from a build. They may be used as a unit for used for other legal building. Since the bottom card is a King, if you move all thirteen, it may only be moved on top of a Space, since there is no card higher in rank than a King.

Removal of all 8 suits in a similar manner, thus totally dismantling the Tableau is a **WINNER!** Believe me, I have tried this game, and it is extremely difficult to win. When you do win at this game, you should mark that day on your calendar of "events to celebrate in perpetuity"!!

Playing the Game Program

Each hand starts with a shuffle. The decks are shuffled together seven times to maximize randomness. The Tableau is then set up. Game play is very simple and intuitive, but I will describe it in detail, here.

One comment on the display of cards on the MM/1 monitor. No attempt is made to graphically represent the existence of the face down cards that are underneath face up cards. Instead, a numeral is displayed above each row that is the number of face down

Spider

cards in that row. At the start of the game, these numbers are 5 for the leftmost 4 rows and 4 for the remaining 6 rows.

As cards are moved onto the top of the Tableau rows in building moves, it is traditional not to completely cover up the card underneath it. In this manner, the cards work themselves down, halfway on top of the card above it on the screen. So, the point is, the card at the bottom of the screen is the *top card* of the pile. The card at the top of the screen is the bottom card of the pile.

From one to thirteen cards may be moved in a single Tableau building move. So, in order to avoid confusion and make the following instructions simpler, when I refer to the *bottom* card, I am referring to the card in a row that is nearest to the bottom of the screen. When I refer the *top* card, I am referring to the card in a row that is closest to the top of the screen. In relative references, cards *above* the card in question are the cards towards the top of the screen, the cards *below* are the cards towards the bottom of the screen.

One other thing. In Spider, there can accumulate more than thirteen cards in a single row. The game program can only display thirteen cards in a row (you can only move thirteen at a time, anyway). So, if a row contains more than thirteen cards, all you can see are the *top* thirteen, the thirteen that could possibly be available for moving.

Each building move consists of two actions. First selecting the card or cards to move then telling Spider where to move it or them to. Starting at the bottom of any row, up to thirteen cards may be selected by clicking inside the uppermost card that is to be moved. If only one card is being moved, simply click somewhere inside it. A single card being moved must either be the bottom card in a row, or the only card in the row. When you make a selection, all cards in the selection will be highlighted with a red border. In case you change your mind before moving the card(s), de-select the card(s) by clicking on the same card you initially clicked in again. The red border will go away indicating the card(s) was/were deselected.

To move the selected Tableau card(s), point to the location you want to move them to and click the mouse button. This can only be one of two locations. Either to a Space (indicated by a white box) or the bottom card of a different row, if that card meets the next higher rank qualification. Only a valid move will cause an action to occur. Attempts at an invalid move will be ignored.

If you are moving from a row that has hole card(s) left, the top one will be automatically turned over, thus decrementing the number above it. If there are no face down cards left in the row a white box will be drawn indicating a "Space" row in the Tableau. As mentioned, the number over the rows indicates how many face down cards there are left in that row. As they are turned over, this number counts down to zero.

Once there are no Tableau to Tableau moves or the ones left you do not care to take, you must select the Hand to deal out another row of cards face up. To deal the Hand, point the

Spider

mouse cursor to the face down card below the word Hand and click the mouse button. After the fifth deal is finished, the crosshatch pattern indicating face down cards changes to a white box to indicate no cards left.

To discard a suit properly arranged, click on it as if you were making any Tableau move, and then click inside the red box under the word Discard. The number below the box will count down. Reaching zero means you win the game!

The end of the game is signaled by either winning as described above or by giving up. You can give up by two methods. You can chicken out and start up a new game by selecting the New Game Action Menu item that is described later. Or, if you play out a hand until there are no cards left and there are no more moves you can make, click inside the white box under the word Hand to signal that you have given up. At the end of each game an Overlay Window will indicate how many games you have won, how many you have lost, and a percentage of games won.

The Action Menu

New Game

This item assumes you wish to concede the current game. It is counted as a game lost and an Overlay Window displays your current standings. A few seconds later, the screen is cleared and a new game set up.

Animate On/Animate Off

By default, when you start Spider, it is in *animate* mode. As with the other options, you can override this with a command line option. As with the other options, the value displayed in the Menu Item is the **current** state of animation. Animate ON mode means that in any single card move and the dealing of the deck, the cards will appear to *move* from one location to the other. To turn it off, select the Animate On menu item. It will change to Automate Off. To turn the animation back on, select the Animate Off menu item.

Help

Clicking on this menu item causes an Overlay Window to be displayed with a brief display of the rules of the game. You must click the mouse button to resume play.

Quit

To quit play and exit the game program, you can select either this menu item, or click on the *Close* icon. A dialog box gives you the chance to either resume the current hand or actually quit the game program.

Poker

Basic Game Rules

Poker Solitaire is a variation of Solitaire that marries the two card games of *Poker* and *Solitaire*. Accurate calculation of the odds of Poker hands as well as lucky guessing aid in high scores with this game. Basically, what you do is deal cards from the *Deck*, one at a time, and place each card as it is turned over somewhere in the *Tableau* that is a square of five rows and five columns. Thus, only the top 25 cards of the Deck are played in a game. Poker Solitaire does not have any *Foundations*.

Once all 25 slots in the Tableau have been filled, the score is determined by looking at the five rows and five columns as ten Poker hands. So while you are placing the cards in the Tableau, you always be considering what the final outcome can be. A variation of Poker Solitaire is to deal out the 25 cards, study all 25 of them at once, and then place them in the Tableau.

For those of you who may not be familiar with the game of Poker, I will describe the different types of hands that can occur in Poker, with the most difficult hand to the easiest hand. First of all, let me mention that for hands that contain a run, the Ace can be either high or low, whichever gives the hand the highest value.

Royal Flush - All five cards are of the same suit, and are in a run from the 10 to the Ace.

Straight Flush - All five cards are of the same suit and in a run, but the high card is not an Ace.

Four of a Kind - Four of the five cards are of the same rank, the fifth card's suit and rank are irrelevant.

Full House - Three of the five cards are of the same rank, and the other two are also the same rank, but a different rank than the other three, since there are only four cards in the deck of equal rank.

Flush - A five cards are of the same suit, the ranks of the five cards are irrelevant.

Straight - A five cards are in a run, that is the ranks of all the cards in the hand are sequential numbers but the suit of the cards is irrelevant.

Three of a Kind - Three of the five cards are the same rank, the remaining two cards are irrelevant.

Two Pairs - Two of the five cards are of the same rank, and two others are also of the same rank, but a different rank than the first pair. The fifth card is irrelevant.

Poker

One Pair - Two of the cards are of the same rank, and the remaining three cards are irrelevant.

If none of the previous characteristics apply, the hand has no value in the game of Poker Solitaire. In the regular card game of Poker when you are playing against another player, those *irrelevant* cards mentioned above become very relevant, but that is unrelated to Poker Solitaire.

In *Hoyle's Rules of Games* by Morehead and Mott-Smith only one method of scoring is mentioned, but Frey in *According to Hoyle* there are two systems for scoring. In that book, the English system assigns a value to the Poker hands according to the degree of difficulty relative to the odds in playing Poker Solitaire. The American system preserves the ranking of the hands according to the odds of regular Poker hands. The breakdown is this:

Hand	English System	American System
Royal Flush	30	100
Straight Flush	30	75
Four of a Kind	16	50
Full House	10	25
Flush	5	20
Straight	12	15
Three of a Kind	6	10
Two Pairs	3	5
One Pair	1	2

So, studying this table for a moment tells us that a Flush is pretty easy to get in Poker Solitaire, while a Straight is not so easy, not as easy as a Full House. Since the English System of scoring preserves the true odds of Poker Solitaire, I chose it to be the default method of scoring for the game program. You add up the values of the 10 Poker hands for a total score for the hand of Poker Solitaire.

Playing the Game Program

After the deck is shuffled, the hand begins with the empty Tableau being drawn as five rows of five slots each, with the empty slots being represented by white boxes. The deck is placed to the left of the Tableau. Shortly, the top card on the Deck is turned over. You then must select which of the 25 slots in the Tableau you want to place that card in. Once you have decided, point inside the white box for that slot and click the mouse. The card will be placed there, and the next card in the Deck will be turned over.

This continues until all 25 slots in the Tableau are filled. When the last slot is filled, the computer will calculate the point value for each of the 10 hands and display it and a total

Poker

for all 10 hands. A few seconds later your current standings are displayed in an Overlay Window. This shows how many points you achieved with the current hand, your total accumulated points, your high hand score, your low hand score, and your average number of points per hand. You are then asked if you want to play another hand. To play another hand, either click the mouse cursor inside the Yes box or press the Y key on your keyboard. To stop playing, click the mouse cursor inside the No box or press the N key on your keyboard.

Poker Solitaire will score your points either with the English system or the American system, but by default, the English System is used. To startup with the American system, use the "a" command line option. You can also change from system to the other via an Action menu command (discussed later).

Poker Solitaire also by default starts up in the standard variation of play, where each card must be placed in its final slot before the next card is even turned over. The variation mentioned earlier can be selected by specifying the "v" option on the command line. You can also switch between the standard and variation with an Action menu item (discussed later).

When playing the variation, the first 25 cards will be automatically dealt out to the Tableau at the beginning of the hand, filling up the Tableau. You then may swap card locations until you are satisfied with the arrangement. To do so, click on one of the cards to swap. It will be bordered in red. Then click on the card to swap it with. They will exchange locations. To de-select the first card and not move it, click on it again. To indicate that you have reached your final arrangement, click the mouse cursor on the Deck, and your points will be evaluated as with the standard game.

At the end of each game, with either the standard game or the variation, Poker Solitaire accumulates the total points for all ten hands. It then accumulates this point total to some counters and displays your standings as of that hand. Totals and figures presented are, total number of hands played, total number of points for all hands played, average total points per hand, highest number of points achieved with a hand, and the lowest number of points that you got with a hand. These standings are also displayed when you select to end the game program. These standings are reset to zero when you either change game style of play or change the method of scoring.

The Action Menu

New Game

Requesting this option will terminate the current game and start a new one. Totals for the current game are not entered into the running game totals.

English/American

This menu selection is a *toggle switch* to switch from scoring system to the other. When the pull down menu is display, the value shown is the **current** scoring system. Select that item to switch to the other system. Since all accumulated point information is reset by selecting this option, you are given a chance to back out with a dialog box.

Animate On/Animate Off

By default, when you start Poker Solitaire, it is in *animate* mode. As with the other options, you can override this with a command line option. As with the other options, the value displayed in the Menu Item is the CURRENT state of animation. Animate ON mode means that in a card move from the Talon to the Tableau or the Foundations or in a move of a card from the Tableau to the Foundations, the card will appear to *move* from one location to the other. To turn it off, select the Animate On menu item. It will change to Animate Off. To turn the animation back on, select the Animate Off menu item.

Standard/Variation

The menu selection is also a toggle switch, in this case to switch between either a Standard game or the game Variation. As with the previous menu item, with the pull down menu is displayed, the current value will be displayed. To switch to the other option select the current option. Since the scores can be radically different, you are given the option of clearing the accumulated scores in a dialog box.

Help

Clicking on this menu item causes an Overlay Window to be displayed with a brief display of the rules of the game. You must click the mouse button to resume play.

Quit

To quit play and exit the game program, you can select either this menu item, or click on the *Close* icon. A dialog box gives you the chance to either resume the current hand or actually quit the game program.

Canfield

Basic Game Rules

This is the true game of *Canfield*. It was devised by a Mr. Canfield who ran a famous gambling dive in Sarasota. There a gambler was able to *purchase* a deck of cards for \$50. Then the player would play out a game of Canfield's variation of Solitaire while being closely watched by an employee of the establishment. The player would receive \$5 back for each card placed on the Foundation, or a special total of \$500 if **all** cards are placed on the Foundation. Therefore, if eleven or more cards were placed on the Foundation, the player would make a profit. Mathematicians haven't computed the odds of making a profit, but Mr. Canfield certainly made a fortune off his players!

As with many other variations of Solitaire, before you begin play, a *Tableau* is set up. With Canfield, a special pile of cards is dealt first. The first thirteen cards in the deck are dealt face down. The pile is then **turned over** and squared up so that only the top card of the pile is visible. This pile is called the *Stock*. The next card in the Deck is dealt face up and becomes the first Foundation. The next four cards are dealt face up to the right of the Stock to form the Tableau.

The Foundations should be in a row above the Tableau, and when the hand begins, only the leftmost Foundation has a card in it. The other three Foundations are the other three cards in the deck that are of the same rank as the first Foundation. For example, if a 9 of Clubs is the first Foundation, the other three 9s are used, when they are available to start the other three Foundations. These three cards must be placed up in the Foundations area as soon as they become available. They cannot be used in any other type of play. During the play of the hand, the Foundations are built upon by the card with the next higher rank of the same suit. Card rank is circular with the Ace being above the King and below the Deuce. All four Foundations need not have the initial card placed before building on other Foundations that do have at least one card.

Since the card rank is circular, when a Foundation reaches the King, it will be built on by an Ace, which is then built on by the Deuce and so forth until the Foundation contains all thirteen cards of the same suit. The obvious goal, overall, is to build all four Foundations to contain all thirteen cards of their respective suits.

Tableau building is similar to *Klondike*, which is probably why Klondike is occasionally incorrectly referred to as *Canfield*. That is, on the bottom card of any of the four Tableau rows may be placed the next lower rank card of opposite color. Canfield also allows the top card on a Tableau row may be moved to another Tableau row. If the bottom card is being moved, all cards in the row, that is all the cards on top of it moves with it as a unit. If the top card is being moved, the rest of the Tableau remains in place. The card being moved must match up with the card it is being moved onto just as with Klondike. It must be the next lower rank and of the opposite color. However, another difference is that since Canfield's rank is circular, a King may be built onto an Ace, and an Ace may be built onto a Deuce.

Canfield

Since Canfield has no face down cards under the Tableau rows, when one Tableau pile is moved as a unit to another Tableau pile, or a single card in a Tableau row is moved and it is the only card in that row, a *Space* is created. A Space must be immediately filled with the top card from the Stock. After the Stock has been exhausted, then Spaces may be filled from the Talon. It is very difficult to get all cards from the Stock in play. If that condition is met, you stand a good chance of winning the game.

Speaking of the Talon, it is formed by turning the Deck over in packets of three cards each. Only the top card is available for building, either to the Tableau or the Foundations. As the top card is played, the card underneath it then becomes available. When the Deck is exhausted, the cards in the Talon are turned over, unshuffled back to the Deck and played through again. The Deck may be played through until there are no plays left to be made. Mr. Canfield had his gamblers play a slight variation. He gave them the choice of turning over only one card at a time from the Deck to the Talon and the Deck can only be played through once or they could turn over three cards at the time but could only go through the Deck three times.

Since the average number of Foundation cards that usually can be played in this fashion, I do not support this variation as it would be simply too frustrating. If there are no plays to be made during a pass through the Deck, and all of the Foundations have not been built up to a King, the hand is lost. As soon as the fourth Foundation is built up to a King, the game is won.

Playing the Game Program

After the shuffle, the Stock, first Foundation, and Tableau are set up for you. The name of the initial Foundation card is displayed below the Foundations to aid you in remembering it. The number of cards in the Foundations is displayed above the Foundations. It counts up as cards are moved to the Foundations. The number of cards remaining in the Stock is displayed above it. It counts down as cards are moved from the Stock to fill Spaces. At the beginning of the game, the three open Foundations are indicated by red squares. Since the Talon also starts out empty, it is initially depicted as a white square.

Game play then begins. To select an entire row to move to another row first select the row to move by clicking in the uppermost card (on the screen, which is the bottom card of the pile) in the row. To move the top card from a row to another row select it by clicking inside it, which will be the card closest to the bottom of the screen. Then to move it, click on the bottom card of the row you wish to move it to. To de-select a Tableau selection, click inside the selected card instead of where you might have moved to.

To move the card from the Talon you first select it by clicking inside it. Then to move it to a Tableau row, click inside the bottom card of the row you wish to move it to. To move it to a Foundation, click inside the Foundation you wish to move it to. To de-select it and not move it, click inside it again.

Canfield

Moving a card from a Tableau row to a Foundation is similar. Click inside it (it **must** be the top card of the row, which will be closest to the bottom of the screen) to select it. Then click inside the Foundation you wish to move it to. You need not do anything to fill a Space if there are cards available on the Stock. If there is a card available on the Stock, the game program will move it for you to a Space as soon as a Space is created.

If there are any more cards left on the Stock the top card will be displayed. If none are left, a white box is drawn indicating an empty Stock. If the Stock is empty when a Space is created in the Tableau, the top card on the Talon **may** be moved to fill the Space. You can turn the Deck over until the desired card to move to the Space is turned over.

When the Stock has been exhausted, it is advisable to get the high card destined for the Foundation (one less in rank than the initial Foundation) to be placed at the top of the four Tableau rows.

If any cards are selected to be moved, and the Deck is selected to turn over, Canfield will de-select the selected cards prior to turning over the Deck.

At the end of each game, either won, lost or given up, Canfield will display the number of games you have won, lost and a percentage of games won.

Some Playing Tips

I found Canfield to be a difficult game at first to learn. I was understandably thankful for my game program's *Assist Mode*. After playing it for a while, I have grown to enjoy playing Canfield and have accumulated this list of tips on how to play the game more successfully.

The two hardest things to remember when playing Canfield is that the Foundation base changes with each hand and the rank is circular, both on the four Tableau rows and on the Foundations. On a Tableau row an Ace is played on a Deuce, it does not immediately go to the Foundations as it does in Klondike. Also, a King can be played on an Ace on a Tableau row. Similarly, an Ace is played on a King on a Foundation. If you are used to Klondike, this is *real hard* to get used to!

One key thing to remember while playing a game is to **ALWAYS** play an eligible card to the Foundation **EXCEPT** for the following situation. It is also **VERY** important to get all of the Stock cards into play. Let's say that the Foundation base is a Five and a Tableau move brought a Five over from the Stock to the Tableau. There is also a Six on another Tableau row of the opposite color and there are more cards left on the Stock. It is better, **in this situation only**, to first move the Five over on the Six, which brings another card over from the Stock. **THEN** move the Five over to the Foundations. **Under no**

Canfield

circumstances, though, should you place a Four on that Five or perform a similar move with some other Foundation Base.

Let me state that last sentence in a more general manner. The first card to the Foundation is the Foundation Base. Each Foundation works up, in a circular rank, to the Foundation Top. If the Foundation Base is a Seven, the Foundation Top is a Six. If the Foundation Base is an Ace, the Foundation Top is a King. If the Foundation Base is a Jack, the Foundation Top is a Ten. **THEREFORE NEVER, EVER, UNDER ANY CIRCUMSTANCES** should you place a Foundation Top card on a Foundation Base card on the Tableau!!! That is the *kiss of death* in Canfield!!

Once you get all Stock cards into play, you've got a good chance to win. When a Space is generated on a Tableau row after the Stock has been depleted, you are free to place **any** card on the top of the Talon. You shouldn't play *just any* card! If a Foundation Top comes up on the Talon in this situation, **play it to the Space!!** The **best** card to be on the top of a Tableau after the Stock has been depleted is a Foundation Top card!! If this does not make sense to you, just think about it for a minute, it will come to you as to why!

Another good candidate in this situation is a card on which another Tableau row can be moved onto. Let's say that the Stock is empty. There is a Space on the Tableau. At the top of one of the Tableau rows is a Six of Hearts. A Seven of Spades shows up on the top of the Talon. Play it to the Space and then move the Tableau row topped with the red Six on to the black Seven. You have gotten the Seven into play and you still have a Space on the Tableau. Make sense?

Canfield is difficult to win, but I have several times, so I know that it **is** possible!!

The Action Menu

New Game

This item assumes you wish to concede the current game. It is counted as a game lost. An Overlay Window displays the current standings of how many games you have won, how many you have lost or given up, and the percentage you have won. A few seconds later, the screen is cleared and a new game set up.

Assist On/Assist Off

This Menu Item is a *toggle switch* to switch back and forth between the two Assist Modes, either ON or OFF. Assist Mode ON provides a couple of *sanity checks* for you. If you click on the Hand, Canfield will check to see if you have any valid moves remaining. If there are, a dialog box will ask you if you are sure if you want to go ahead and turn over the deck. If you ask Canfield to move a card from the Talon to the Tableau or a Tableau to Tableau move, the card to which you are moving the card(s) onto is checked to see of it

Canfield

may be moved to the Foundations. If it is eligible to move to the Foundations, a dialog box asks you if you are sure you want to make that move.

If you ask Canfield to move a card from the Talon to the Tableau, a few other checks are also made. If the Talon card could alternately be moved to the Foundations, or if there is a valid Tableau to Tableau move you will be asked if you are sure if you want to make your selected move. Since it is advisable to get all Stock cards into play as soon as possible, and any Tableau to Tableau move (of a Tableau row as a unit) will free up a Space and put the top Stock card into play, this condition also will ask you in a dialog box if you are sure you want to make the move you have selected.

In no case is a move of the bottom Tableau row to another Tableau row considered as a valid remaining move. Only rarely is this move really advantageous.

Animate On/Animate Off

By default, when you start Canfield, it is in *animate* mode. As with the other options, you can override this with a command line option. As with the other options, the value displayed in the Menu Item is the **current** state of animation. Animate ON mode means that in a card move from the Talon to the Tableau or the Foundations or in a move of a card from the Tableau to the Foundations, the card will appear to *move* from one location to the other. To turn it off, select the Animate On menu item. It will change to Animate Off. To turn the animation back on, select the Animate Off menu item.

Help

Clicking on this menu item causes an Overlay Window to be displayed with a brief display of the rules of the game. You must click the mouse button to resume play.

Quit

To quit play and exit the game program, you can select either this menu item, or click on the *Close* icon. A dialog box allows you to either resume the current hand or actually quit the game program.

Making a Bootable Games Disk

This last special section now mentioned in the Introduction will be of interest only to beginning to novice users of OS-9 Level 2 on the Color Computer 3. This information will be of little value to MM/1 owners.

Many of you are probably familiar with the Tandy OS-9 based games that come on a "bootable disk". To run the games you simply place the boot disk in your floppy drive, enter the DOS command and the game is automatically be started. Since **ColorSystems** is not affiliated with Tandy or Microware, we cannot supply you with a bootable, ready to run Games Disk. You can create a same type of boot disk with any one of the Solitaire Variations or a boot disk with all variations. This section will instruct you on how to do this.

First thing you'll need to do is to make a bootable disk, so experience with this operation is desirable. If you need help, I will be more than happy to assist you in this operation. It also helps if you have a dual floppy drive system. If you have but one floppy drive it will be quite a chore, but still possible. These instructions will assume that your system has at least two disk devices. I will use the device names /d0 and /d1. If your system devices are named otherwise, simply substitute the names of your system's devices. Also, any time I instruct you to place a software distribution disk, such as the disk that I sent you your games on or the OS-9 distribution disks, **always** use a **copy** of the original. Never use the original disks! I will also indicate to place either Side A or Side B in your disk drive. If your software disk is the 80 track DS 3.5" format, you can ignore that instruction and place the backup copy of your 3.5" disk in your disk drive.

One other thing, if you want to make the boot disk such that it contains **all** Variations, your disk devices **must** be **double-sided**! However, a single game boot disk will fit on a single-sided disk.

First, boot up OS-9. When OS-9 finishes booting, enter the following command:

```
OS9: load copy format
```

Remove your boot disk. Place a copy of the OS-9 disk labelled "Boot/Config/Basic09" (hereafter referred to as the "Config" disk) in device /d1. Place a copy of the Variations of Solitaire games disk (hereafter referred to as the "Games" disk) in device /d0 on Side B. If you will be building your boot disk on a 35 track single sided disk device enter the following commands:

```
OS9: chd /d0/modules
```

```
OS9: copy blgames.35 /d1/modules/blgames
```

If you will be building your boot disk on a 40 track double sided disk device, enter these commands, instead:

```
OS9: chd /d0/modules
```

Making a Bootable Games Disk

```
OS9: copy blgames /d1/modules/blgames
```

If you will be building your boot disk on some other format, then you are probably well versed enough with OS-9 to know how to edit either of the boot list files and reference the appropriate device descriptors for your system's configuration.

Remember!

A combined boot disk of **all** variation will **not** fit on a 35 track single sided disk. If that is the only disk configuration your system has, you will **only** be able to make single game boot disks.

If the copy command returns an error 218, then you already have a file on your Config disk that is named blgames in the MODULES directory. Delete that file or rename it to something else and repeat the copy command. Once you have successfully completed the copy command, remove the Games disk. Place a blank floppy in device /d0. Enter the following commands:

```
OS9: format /d0 "Games" r
OS9: chd /d1/modules
OS9: chx /d1/cmds
OS9: os9gen /d0 <blgames
```

When these commands have been done, remove the Config disk from device /d1 and place your boot disk in. **Be sure you put the OS-9 boot disk in device /d1!** Then enter the following commands:

```
OS9: chx /d1/cmds
OS9: chd /d1/cmds
OS9: mkdir /d0/CMDS
OS9: mkdir /d0/SYS
OS9: copy grfdrv /d0/cmds/grfdrv
OS9: copy shell /d0/cmds/shell
OS9: copy link /d0/cmds/link
OS9: copy load /d0/cmds/load
OS9: copy echo /d0/cmds/echo
OS9: copy merge /d0/cmds/merge
OS9: copy setime /d0/cmds/setime
OS9: copy display /d0/cmds/display
OS9: copy unlink /d0/cmds/unlink
OS9: chd /d1/sys
OS9: copy stdfonts /d0/sys/stdfonts
OS9: copy stdptrs /d0/sys/stdptrs
OS9: copy stdpats_4 /d0/sys/stdpats_4
```

Making a Bootable Games Disk

All of the commands **must** complete with no error! If you get a 216 error with any of them, then you have an incomplete boot disk in device /d0! Start the entire procedure over from the beginning, except substitute your original OS-9 disk labelled "System Master" for this last set of commands. When you have successfully completed these commands, remove your boot disk (or System Master) from device /d1 and replace it with the Games disk on Side A first. The next commands to perform depends on whether you are making a single game boot disk or a combined game boot disk with all variations. If you are making a single game boot disk, choose which game you want to put on the boot disk. It **must** be one of the following: **Pyramid**, **Klondike**, **Spider**, **Poker**, or **Canfield**. If you are installing Canfield, start on Side B, as all files you will need are on that side. All other games, start out with Side A of the games disk. Then enter the following commands, substituting the name of the game you wish to copy for the word "gamename":

```
OS9: chd /d1/cmds
OS9: copy gamename /d0/cmds/autoex
```

If you are copying from Side A, at this time flip your disk over to Side B and continue with these commands.

```
OS9: chd /d1
OS9: copy startup.single /d0/startup
OS9: chd cmds
OS9: copy setup /d0/cmds/SetUp
```

Your single game boot disk is now ready for use! You boot it as you would boot any OS-9 disk, put it in your main disk drive and enter the DOS command. You will need to enter a date and time during the startup. The actual date and time is not required, but some date and time is, and do not enter the same date and time each time you boot it. All game variations utilize the system's current date and time to randomize their card shuffling algorithm.

To build a boot disk with all game variations on it, start out with your disk mounted as Side A. Enter these commands:

```
OS9: chd /d1/cmds
OS9: copy pyramid /d0/cmds/Pyramid
OS9: copy klondike /d0/cmds/Klondike
OS9: copy spider /d0/cmds/Spider
OS9: copy poker /d0/cmds/Poker
```

At this time, flip your Games disk over to Side B and continue with these commands:

```
OS9: chd /d1
OS9: copy startup.combined /d0/startup
OS9: chd cmds
OS9: copy canfield /d0/cmds/Canfield
```

Making a Bootable Games Disk

```
OS9: copy solitaire /d0/cmds/autoex  
OS9: copy setup /d0/cmds/SetUp
```

Your combined Games boot disk is now ready for use! As with the single game boot disk, boot is as you would for any normal OS-9 boot disk. Also, as with the single game boot disk, you must enter a date and time during the boot process. The combined Games boot disk has a special program that runs automatically which is a *Menu* type of program. Use your mouse to select the game you wish to play and click the mouse button to start the game up. When you exit from any game, you will be returned to the Menu program and allowed to select a different game to play (or the same one again, if you wish!).

With *either* a single game boot disk or a combined Games boot disk, once the boot has completed, you may remove the diskette from your disk drive. It is no longer needed, as all necessary files and programs have been pre-loaded into memory. This also implies that a combined Games boot disk requires a 512K system, but a single games disk will function on a system with at least 256K. Sorry, but **none** will operate on a 128K system!

ColorSystems

**P. O. Box 540
Castle Hayne, NC 28429**

(910) 675-1706